

CLAIMS

1. A light output device comprising
 - an external information receiver for receiving first external information, which is information transmitted from an outside, among external information;
 - an external information acquisition unit for acquiring second external information, which is other information, among the external information;
 - a light output unit for outputting light; and
- 10 a light output controller for controlling, based on the first external information and the second external information, a light output of the light output unit to be in one or more number of output states selected from among three or more number of output states.
- 15 2. The light output device of claim 1, wherein
 - the light output unit comprises a light output tool for outputting light;
 - the external information includes type information, which is information indicating an information type, and a information value, which is a value exhibited in the type information; and
- 20 the light output controller controls the light output of the light output tool, based on a type information and a information value contained in the first external information, and a type information and a information value contained in the second external information.
- 25 3. The light output device of claim 2, further comprising a type information memory for storing type information of the external information; wherein

the light output controller instructs the light output unit to output the light only when the type information contained in the first external information is relevant to the type information stored in the type information memory.

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4. The light output device of claim 3, wherein

the light output controller is capable of controlling a plurality of light output methods, and the type information memory stores a light output method identifier for identifying the light output method and a type information under a counterpart relationship; and

the light output controller instructs the light output unit to output the light in accordance with the light output method identified by the light output method identifier only when the type information contained in the first external information is relevant to the type information stored in the type information memory.

5. The light output device recited in one of claims 1 through 4, said device further comprising:

an external information memory for storing a plurality of pieces of 20 pieces of the external information containing the first external information and the second external information, wherein

the light output controller controls the light output of the light output unit based on the plurality of pieces the external information stored in the external information memory.

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6. The light output device recited in one of claims 1 through 5, further comprising an external information transmitter for transmitting the second

external information.

7. A light output device comprising:

an external information acquisition unit for acquiring external
5 information;

an external information transmitter for transmitting the external
information acquired at the external information acquisition unit;

a light output unit for outputting light;

10 a parameter receiver for receiving a light control parameter, which is
information related to a method of light outputting at the light output unit;
and

15 a light output controller for controlling, based on the light control
parameter, an output of the light at the light output unit to be one or more
number of output states selected from among three or more number of output
states.

8. The light output device of claim 7, wherein

the light output unit comprises a light output tool for outputting light;
the external information includes type information, which is
20 information indicating an information type, and a information value, which is
a value exhibited in the type information; and

the light output controller controls the output of light at a plurality of
the light output tools based on type information and information value
contained in the light control parameter.

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9. The light output device of claim 8, further comprising a type
information memory, which stores at least one of the type information

contained in the external information and the type information contained in the light control parameter; wherein

the light output controller instructs the light output unit to output light only when the type information contained in the light control parameter
5 is relevant to the type information stored in the type information memory.

10. The light output device of claim 9, wherein

the light output controller is capable of controlling a plurality of light output methods;

10 the type information memory stores a light output method identifier for identifying the plurality of light output methods and type information under a counterpart relationship; and

the light output controller instructs the light output unit to output a light in accordance with the light output method identified by the light output method identifier, only when the type information contained in the light control parameter is relevant to the type information stored in the type information memory.
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11. The light output device recited in one of claims 7 through 10, wherein

20 the external information transmitter transmits a plurality of the external information, and

the light output controller controls the light output at light output unit based on the plurality of light control parameters in the parameter receiver.
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12. The light output device recited in one of claims 1 through 11, wherein

the light output controller controls the light output to be one light

intensity level among three or more number of light intensity levels.

13. The light output device recited in one of claims 1 through 11, wherein
the light output controller instructs a color of the light output to be

5 one color among three or more number of colors.

14. The light output device recited in one of claims 1 through 11, wherein
the light output controller controls the light output method to be one
blinking method among three or more number of blinking methods.

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15. The light output device recited in one of claims 1 through 11, wherein
the light output controller controls the light output method to be one
light source revolving method among three or more number of light source
revolving methods.

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16. The light output device recited in one of claims 1 through 11, wherein
the light output controller controls the light output size to be one light
source size among three or more number of light source sizes.

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17. The light output device recited in one of claims 1 through 16, wherein
the external information includes information indicating speed of
data input at an input apparatus through which the data is input.

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18. The light output device recited in one of claims 1 through 16, wherein
the external information contains information indicating the CPU
loading rate.

19. The light output device recited in one of claims 1 through 16, wherein
the external information contains location information which is
information related to the location.
- 5 20. The light output device recited in one of claims 1 through 16, wherein
the external information contains place information which is
information related to the place.
- 10 21. The light output device recited in one of claims 1 through 16, wherein
the external information contains pressure information which is
information related to the pressure.
- 15 22. The light output device recited in one of claims 1 through 16, wherein
the external information contains heartbeat pulse information which
is information indicating the heartbeat pulse counts.
- 20 23. The light output device recited in one of claims 1 through 16, wherein
the external information contains body temperature information
which is information indicating the body temperature.
24. The light output device recited in one of claims 1 through 16, wherein
the external information contains blood sugar level information which
is information indicating the blood sugar level.
- 25 25. The light output device recited in one of claims 1 through 16, wherein
the external information contains health condition information which
is an information on the health condition.

26. The light output device recited in one of claims 1 through 16, wherein
the external information contains PH value information which is
information related to the PH value.

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27. The light output device recited in one of claims 1 through 16, wherein
the external information contains angle information which is
information related to the angle.

10 28. The light output device recited in one of claims 1 through 16, wherein
the external information contains revolution information which is
information related to the revolution.

15 29. The light output device recited in one of claims 1 through 16, wherein
the external information contains brain wave information which is
information related to the wave.

20 30. The light output device recited in one of claims 1 through 29, wherein
a shape of said light output device is one of cubic, rectangular or
spherical.

25 31. A relay for receiving an external information of an outside and
transmitting the external information to a light output device recited in one
of claims 1 through 6 and claims 12 through 30, which relay comprising;
an external information receiver for receiving a sender identifier, which
identifies a sender of the external information, and the external information;
and

an external information transmitter for transmitting external information received at the external information receiver to a transmission destination identified by a transmission destination identifier acquired at the transmission destination identifier acquisition unit.

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32. The relay of claim 31, further comprising

a transmission control information memory which is storing the transmission destination identifier for identifying the external information's transmission destination, and a transmission control information which is a counterpart of the transmission destination identifier, for one set or more number of sets; and

10 a transmission destination identifier acquisition unit for acquiring, from the transmission control information memory, a transmission destination identifier which is a counterpart of the sender identifier contained in the 15 external information received at the external information receiver.

33. A relay comprising

an external information receiver for receiving a plurality of external information from a plurality of external apparatuses;

20 a light control parameter determination unit for determining a light control parameter based on the plurality of external information; and

a parameter transmitter for transmitting a light control parameter determined at the light control parameter determination unit to a light output device recited in one of claims 7 through 10 and claims 12 through 30.

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34. A relay comprising

an external information receiver for receiving history information,

which is a plurality of external information about an external apparatus, from a plurality of external apparatus;

a light control parameter determination unit for determining a light control parameter based on the plurality of history information; and

5 a parameter transmitter for transmitting a light control parameter determined at the light control parameter determination unit to a light output device recited in one of claims 11 through 30.

35. A computer-readable program for making a computer execute a light
10 output device control method, said method comprising the steps of

(a) receiving, among external information, first external information which being information transmitted from an outside origin;

(b) acquiring a second external information, which is other information, among the external information; and

15 (c) controlling the light output based on the first external information and the second external information.

36. The program of claim 35, wherein

the external information includes type information which is
20 information indicating a type of information, and information value which is a value exhibited in the type information; and

light output is controlled at step (c) based on type information and
value information contained in the first external information, and type
information and information value contained in the second external
25 information.

37. The program of claim 36, which method further comprising the step of

(d) storing type information of the external information; wherein
at step (c), it is instructed to output the light only when the type
information contained in the first external information is relevant to the
stored type information.

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38. The program of claim 37, wherein

at step (c), it controls a plurality of light output methods;
at step (d), a light output method identifier for identifying the
plurality of light output methods and type information are stored under a
10 counterpart relationship; and

at step (d), it is instructed to output the light in accordance with a
light output method identified by the light output method identifier only
when the type information contained in the first external information is
relevant to the stored type information.

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39. The program recited in one of claims 35 through 38, which method
further comprising the step of

(e) recording a plurality of the external information containing the
first external information and the second external information; wherein
20 at step (c), the light output is controlled based on the plurality of
pieces of the external information.

40. The program recited in one of claims 35 through 39, which method
further comprising the step of

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(f) transmitting the external information.

41. A computer-readable program for making a computer execute a method

of controlling a light output device, said method comprising the steps of

- (a) acquiring an external information;
- (b) transmitting the external information;
- (c) receiving a light control parameter, which is information related to the light output method; and
- (d) controlling, based on the light control parameter, the output of light to be in one or more number of output states selected from among three or more number of output states.

10 42. The program of claim 41, wherein

the external information includes type information which is information indicating an information type, and information value which represents a value exhibited in the type information; and

15 at step (d), the light output is controlled based on type information and information value contained in the light control parameter.

43. The program of claim 42, which method further comprising the step of

(e) storing at least one of type information contained in the external information and type information of the light control parameter, wherein

20 at step (d), light output is controlled only when type information contained in the light control parameter is relevant to the stored type information.

44. The program of claim 43, wherein

25 at step (c), a plurality of light output methods is controlled;

at step (e), a light output method identifier for identifying the plurality of light output methods and the stored type information are stored

under a counterpart relationship; and

at step (d), the light output is controlled in accordance with a light output method identified by the light output method identifier, only when type information contained in the light control parameter is relevant to the
5 stored type information.

45. The program recited in one of claims 41 through 44, wherein

at step (b), it transmits a plurality of the external information; and

at step (d), the light output is controlled in accordance with a plurality
10 of the light control parameters.